

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

**General Order of Approval No. 11AQ-GO-02
Portable and Stationary Concrete Batch Plants**

September 21, 2011

This General Order is applicable to any source applying for coverage in Adams, Asotin, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, San Juan, Stevens, Walla Walla, and Whitman counties or is regulated by the Washington State Department of Ecology (Ecology).

Pursuant to the state of Washington Clean Air Act Chapter 70.94 Revised Code of Washington (RCW), Ecology general regulations for air pollution sources, Chapter 173-400 Washington Administrative Code (WAC), specifically WAC 173-400-110 WAC (New Source Review), Chapter 173-400-560 WAC (General Order of Approval) and Chapter 173-460 WAC (Controls for New Sources of Toxic Air Pollutants), Ecology now finds the following:

FINDINGS

1. Any stationary or portable concrete batch plant proposing to operate in one of the counties listed above or proposing to operate at a source that is regulated by Ecology may request coverage under this General Order.
2. A concrete batch plant cannot obtain coverage under this Order if it is part of a new major stationary source or constitutes a major modification to a major stationary source which is subject to review under the Prevention of Significant Deterioration Program. The addition of the concrete batch plant to an existing source must not make the source subject to the Air Operating Permit (AOP) program or require a modification in an existing AOP permit.
3. The applicant must apply for coverage under this General Order. Please contact the appropriate Ecology office with jurisdiction over your source:

Air Quality Program
Central Regional Office
15 West Yakima Avenue,
Suite 200
Yakima, WA 98902-3401
Phone: (509) 575-2490

Industrial Section
P.O. Box 47600
Olympia, WA 98504-7600
Phone: (360) 407-6900

Air Quality Program
Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205-1295
Phone: (509) 329-3400

Nuclear Waste Program
Hanford Unit
3100 Port of Benton Blvd.
Richland, WA 99354
Phone: (360) 372-7950

Air Quality Program
Northwest Regional Office
3190-160th Avenue S.E.
Bellevue, WA 98008-5452

Or on the internet at http://www.ecy.wa.gov/programs/air/AOP_Permits/Boiler/GeneralOrders.htm.

September 21, 2011

4. The proposed source, if constructed and operated in accordance with the application and this General Order, will meet the requirements for Best Available Control Technology (BACT) for criteria pollutants and BACT for toxics (tBACT).
5. This General Order applies to stationary and portable concrete batch plants.
 - 5.1. A stationary concrete batch plant is one that remains at the same location for longer than one year following start of operations.
 - 5.2. A portable concrete batch plant is one that remains at the same location (pit, quarry, or operating site) for less than or equal to 365 days following start of operations.
6. Permittees utilizing nonroad engines must comply with the requirements of WAC 173-400-035.
7. Within thirty (30) days of receipt of an application for coverage under a General Order of Approval, Ecology shall notify the applicant in writing that the application is incomplete, approved, or denied. If an application is incomplete, Ecology shall notify the applicant of the information needed to complete the application. If an application is denied, Ecology shall notify the applicant of the reasons why the application is denied. Coverage under a General Order of Approval is effective as of the date of issuance of approval by Ecology.

THEREFORE, IT IS ORDERED that a concrete batch plant that meets the specification and limitations contained in this General Order, and more specifically detailed in the Technical Support Document prepared on September 21, 2011 is approved for construction, installation, and operation, provided that the following conditions are met.

APPROVAL CONDITIONS

1. This Order supersedes 08-AQG-002 issued on June 18, 2008.
2. OPERATION AND EMISSION LIMITATIONS
 - 2.1. In-transit mix must be limited to 150,000 tons of concrete in any consecutive 12-month period (74,500 cubic yards).
 - 2.2. Central mix must be limited to 495,000 tons of concrete mixed in any consecutive 12-month period (246,000 cubic yards).
 - 2.3. The permittee must comply with the attached Fugitive Dust Control Plan (FDCP).
 - 2.4. The concrete batch plant must be located on not less than one acre that has restricted access to the general public.
 - 2.5. There must be no visible emissions crossing the property line.

3. EQUIPMENT RESTRICTIONS

- 3.1. Cement and cement supplement transfers to the silos must:
 - 3.1.1. Be controlled by a baghouse during silo filling.
 - 3.1.2. Not overflow into the baghouse during silo filling.
 - 3.1.3. Only occur if the silo has a level indicator alarm and/or lights that are installed and operational.
- 3.2. The weigh hopper must be enclosed and vented to a baghouse.
- 3.3. In-transit mixing operations must use a flexible boot or other flexible containment system that fits into or around the truck mixer.
- 3.4. Central mix operations must have the mixer enclosed and vented to a baghouse. The mixer must not operate unless the baghouse is in operation.
- 3.5. Particulate emissions from baghouse exhaust(s) must not exceed 0.01 grains per dry standard cubic foot (gr/dscf).
- 3.6. The baghouse must have a differential pressure gauge that measures pressure between the inlet and outlet of the baghouse.
- 3.7. Visible emissions from the baghouse exhaust vent must not be greater than 5% opacity.
- 3.8. Fuel-fired water heaters or boilers must use natural gas, propane, liquefied petroleum gas (LPG), or onroad quality diesel fuel. The total heating capacity of the related combustion device(s) must be less than or equal to the following:
 - 3.8.1. Four million Btu/hr for natural gas, propane, and LPG.
 - 3.8.2. One million Btu/hr for onroad quality diesel.

4. ADDITIONAL RESTRICTIONS FOR OPERATION AS A STATIONARY CONCRETE BATCH PLANT

- 4.1. All stationary concrete batch plant equipment must use line power or must have a Notice of Construction Approval Order for power generators before operating as a stationary concrete batch plant.
- 4.2. Stationary in-transit mixing operations producing greater than 15,000 cubic yards of concrete in any 12 consecutive months or having the capability to produce greater than 300 tons of concrete per hour must be shrouded and vented to a dust collection baghouse.

5. ADDITIONAL RESTRICTIONS FOR OPERATION AS A PORTABLE CONCRETE BATCH PLANT

- 5.1. All portable operations must submit to the permitting authority an Air Quality Notification Form for Portable Sources at least 10 days prior to beginning operations at each new site. If operations are anticipated past the end date on a previously submitted notification, the applicant must notify the permitting authority before the end date listed on the original notification.
- 5.2. A portable concrete batch plant cannot remain at the same location (pit, quarry, or operating site) for more than 365 days following start of operations, without meeting the requirements for a stationary concrete batch plant listed in this General Order of Approval.
- 5.3. For portable operations that plan to stay at the same location for longer than one year, the permittee must submit to Ecology, the Air Quality Notification Form for Portable Sources. This form will be used to notify Ecology that the concrete plant intends to operate as a stationary source. Notification under this condition needs to be completed before the end of the one-year period from which operations started as a portable concrete plant.
- 5.4. Power generators and other nonroad engines cannot remain at the same location for longer than one year unless approval as a stationary source is granted under WAC 173-400-110.

6. REQUIRED PLANS

- 6.1. The operational parameters and practices shall be included in an operations and Maintenance (O&M) manual for the facility. The O&M manual shall be prepared, maintained and followed by the permittee, and shall be available for review by Ecology upon request. Emissions that result from a failure to follow the O&M manual relative to compliance with the conditions of this permit may be considered credible evidence that source is not being properly operated and maintained. The O&M manual shall at a minimum include:
 - 6.1.1.1. Normal operating parameters for all air pollution control and processing equipment.
 - 6.1.1.2. A maintenance schedule for all air pollution control and processing equipment.
 - 6.1.1.3. Monitoring and recordkeeping procedures and requirements.

7. MONITORING/RECORDKEEPING/REPORTING

- 7.1. The permittee must collect and retain the following information:
 - 7.1.1. Daily records of the amount of concrete produced must be kept for at least five (5) years. A permittee may use sales records in place of production records.

- 7.1.2. The date, time, duration, and cause of any periods a baghouse is out of service.
- 7.1.3. A weekly record of the pressure differential at each baghouse.
- 7.1.4. Daily water truck records shall be maintained and at a minimum include the date and amount of water used.
- 7.1.5. Additional information may be requested at the discretion of the permitting agency.

8. GENERAL CONDITIONS

- 8.1. Access to the source for the purpose of determining compliance with the terms of this General Order of Approval by Ecology staff or the permitting agency staff must be permitted during normal business hours. Failure to allow such access is grounds for revocation of coverage under this General Order or an enforcement action under the Washington State Clean Air Act.
- 8.2. Legible copies of this General Order of Approval, the Coverage Order, and the O&M manual(s) must be kept on-site and available to employees in direct operation of the facility and must be available for review upon request by Ecology or the local authority.
- 8.3. Operation of the concrete plant must be conducted in compliance with all data and specifications submitted as part of the General Order application and in accordance with the O&M manual requirements.
- 8.4. The permittee is required to comply with applicable rules and regulations pertaining to air quality, and conditions of operation imposed upon issuance of this order. Any violation of applicable state and/or federal air quality rules and regulations or of the terms of this approval is subject to the sanctions provided in Chapter 70.94 RCW. Authorization under this Order may be modified, suspended, or revoked in whole or part for cause including, but not limited to, the following:
 - 8.4.1. Violation of any terms or conditions of this authorization.
 - 8.4.2. Obtaining this authorization by misrepresentation or failure to fully disclose all relevant facts.
 - 8.4.3. Receipt of this General Order requires the permittee to register the applicable source emission unit(s) with Ecology. Upon request, the permittee must submit an inventory of emissions from the applicable source emission unit(s) and pay all applicable registration fees.
 - 8.4.4. The provisions of this General Order of Approval are severable and if any provision of this authorization, or application of any provisions of this authorization, to any circumstance is held invalid, the application of such provision to their circumstances, and the remainder of this authorization shall not be affected thereby.

September 21, 2011

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form—by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 Pollution Control Hearings Board 1111 Israel Road SW, Suite 301 Tumwater, WA 98501	Department of Ecology Attn: Appeals Processing Desk P.O. Box 47608 Olympia, WA 98504-7608 Pollution Control Hearings Board P.O. Box 40903 Olympia, WA 98504-0903

For additional information, visit the Environmental Hearings Office website at <http://www.eho.wa.gov>.

APPROVED BY:

Richard B. Hibbard, P.E.
Program Development Section
Air Quality Program

Date

Stuart A. Clark
Air Quality Program Manager
Washington State Department of Ecology

Date

Attachment 1

Concrete Batch Plant Fugitive Dust Control Plan (FDCP)

The Ecology Air Quality Program (AQP) has developed fugitive emission control requirements to supplement General Order No 11AQ-GO-02. The information provided below identifies emission points from fugitive sources and provides a menu of options to control these emissions from a concrete plant operation.

I. FUGITIVE EMISSION POINTS

- A. Materials handling
 - 1. Aggregate being added to and/or removed from stockpiles
 - 2. Front-end loader dumping into aggregate bins
- B. Wind erosion from exposed surfaces
- C. Site vehicle access areas
- D. Paved roads (carryout, spillage)

II. FUGITIVE EMISSION CONTROL OPTIONS

- A. **REQUIRED:** Aggregate and sand should contain sufficient moisture to minimize dust emissions when transferring to storage and from storage to the aggregate bins.
- B. **REQUIRED:** Locate the plant and access roads to minimize front-end loader travel to the storage piles.
- C. **REQUIRED:** Pave, chemically treat, and/or use water-spray on site vehicle traffic access areas as necessary to control fugitive dust emissions.

The following factors should be considered when applying water and/or dust suppressants to on-site vehicle traffic access areas:

- 1. Application rate: Amount of water and/or type and amount of suppressant applied per unit area of roadway (gallons/square foot)
 - 2. Frequency of application (time between applications)
 - 3. Traffic volumes (vehicles per hour)
 - 4. Weather conditions
- D. **REQUIRED:** Speed limitations for site vehicles with procedures to maintain and enforcement procedures to minimize fugitive dust emissions from haul roads and vehicle access areas.
 - E. **REQUIRED:** Apply water spray to stockpiles to minimize fugitive emissions as necessary to minimize fugitive dust.
 - F. **REQUIRED:** Cleaning (sweeping) paved surfaces of vehicle track-out from the site.
 - G. **RECOMMENDED:** Locate, size, and configure stockpiles to reduce wind erosion.

The fugitive emission points and control options described above pertain to a concrete plant and associated activities.

Unless otherwise specified in this general order, the Ecology Air Quality Program requires that fugitive visible emissions be controlled to no more than 10 percent opacity. Changes proposed to this FDCP by the operator must be submitted for review and approved in advance by Ecology.